

FORM PTO 1449
(REV 2-32)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEFile No.
144213Serial No.
10/707,993

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant(s):
Burrell et al.Filing Date:
01/30/2004Group:
3762

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MB	1	5,391,199	02/21/1995	Ben-Haim	607	122	07/20/1993
	2	5,738,093	*4/14/1998	Ben-Haim	128	653.1	02/01/1996
	3	6,289,115 B1	09/11/2001	Takeo	382	130	02/12/1999
	4	6,289,239 B1	09/11/2001	Panescu et al.	600	523	03/29/2000
	5	6,389,104 B1	05/14/2002	Bani-Hashemi et al.	378	98.12	06/30/2000
	6	6,468,265 B1	10/22/2002	Evans et al.	606	1	11/09/1999
MB	7	6,650,927 B1	11/18/2003	Keidar	600	424	08/18/2000

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINE R INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MB	3	2003/0097219 A1	05/22/2003	O'Donnell et al.	702	19	10/12/2001
	4	2003/0187358 A1	10/02/2003	Okerlund et al.	600	443	03/15/2002
	10	2003/0220557 A1	11/27/2003	Cleary et al.	600	409	02/28/2003
	5	2004/0087850 A1	05/06/2004	Okerlund et al.	600	407	11/01/2002
	6	2004/0225328 A1	11/11/2004	Okerlund et al.	607	9	05/09/2003
	7	2004/0225212 A1	11/11/2004	Okerlund et al.	600	407	05/07/2003
MB	8	2004/0225331 A1	11/11/2004	Okerlund et al.	607	14	05/09/2003

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION Y / N
MB	15	EP 1182619 A2	27.02.2002	European Union			Y
	16	EP 1321101 A2	18.12.2002	European Union			Y
	17	WO 91/07726	30.05.1991	WO			Y
MB	18	WO 96/10949	18.04.1996	WO			Y

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

MB	19	PCT Search Report for PCT/US2004/020909
	20	F. H.M. Wittkamp et al.; "Loca Lisa - New Technique for Real-Time 3-Dimensional Localization of Regular Intracardiac Electrodes;" <i>Circulation</i> ; 1999; 99: 1312-1317.
MB	21	"Advanced Vessel Analysis" product description, [online] http://www.gehealthcare.com/usen/ct/clin_app/products/aswessel.html [retrieved 12/01/2004]
	22	"CardiIQ" product description, [online], http://egems.gehealthcare.com/geCommunity/Europe/flex_trial/awFlexTrial/aw3_1/eflextrial [retrieved 12/01/2004]

Examiner

Mark Burrell

Date considered

1-22-07

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		10707993	
	Filing Date		2004-01-30	
	First Named Inventor	Marc Anthony Burrell		
	Art Unit	3766		
	Examiner Name	Bockelman, Mark		
	Attorney Docket Number	144213/GEM-0099		

U.S.PATENTS							Remove	
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear		
MB	1	5515849		1996-05-14	Murashita et al.			
MB	2	6058218		2000-05-02	Cline			
If you wish to add additional U.S. Patent citation information please click the Add button.							Add	
U.S.PATENT APPLICATION PUBLICATIONS							Remove	
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear		
MB	1	20030120264	A1	2003-06-26	Lattouf			
If you wish to add additional U.S. Published Application citation information please click the Add button.							Add	
FOREIGN PATENT DOCUMENTS							Remove	
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T ⁵
MB	1							<input type="checkbox"/>
If you wish to add additional Foreign Patent Document citation information please click the Add button.							Add	
NON-PATENT LITERATURE DOCUMENTS							Remove	


**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10707993
Filing Date	2004-01-30
First Named Inventor	Marc Anthony Burrell
Art Unit	3766
Examiner Name	Bockelman, Mark
Attorney Docket Number	144213/GEM-0099

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
MB	1	GENEVIEVE DERUMEAUX et al., Doppler Tissue Imaging Quantitates Regional Wall Motion During Myocardial Ischemia and Reperfusion, Circulation Journal of the American Heart Association, Circulation 1998; 97; 1970-1977	<input type="checkbox"/>
	2	OLIVIER GERARD et al., Efficient Model-Based Quantification of Left Ventricular Function in 3-D Echocardiography. IEEE Transactions on Medical Imaging, 21 (9): pp. 1059-68, September 2002.	<input type="checkbox"/>
	3	WAHLE et al., 3D Heart Vessel Reconstruction from Biplane Angiograms, IEEE Computer Graphics and Applications, 16(1): pp. 65-73, January 1996.	<input type="checkbox"/>
MB	4	HELMUT MAIR et al., Epicardial Lead Implantation Techniques for Biventricular Pacing via Left Lateral Mini-Thoracotomy, Video Assisted Thoracoscopy and Robotic Approach, The Heart Surgery Forum, 6(5): pp. 412-417, March 2003.	<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature		Date Considered	1-22-07
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10707993
Filing Date	2004-01-30
First Named Inventor	Burrell
Art Unit	3762
Examiner Name	NYA
Attorney Docket Number	144213 (GEM-0099)

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1		<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature		Date Considered	1-22-07
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		10707993	
	Filing Date		2004-01-30	
	First Named Inventor	Burrell		
	Art Unit	3762		
	Examiner Name	NYA		
	Attorney Docket Number	144213 (GEM-0099)		

U.S.PATENTS

Remove

Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
MB	1	6246898		2001-06-12	Vesely, et al,	
	2	7047060		2006-05-16	Wu	
	3	4364397		1982-12-21	Citron, et al.	
	4	5765561		1998-06-16	Chen, et al.	
MB	5	6950689		2005-09-27	Willis, et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

Add

U.S.PATENT APPLICATION PUBLICATIONS

Remove

Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

Add

FOREIGN PATENT DOCUMENTS

Remove

PTO-1449

Attorney's Docket Number
144213/GEM-0099Serial Number
10/707,993INFORMATION DISCLOSURE STATEMENT BY APPLICANT
LIST OF ITEMSName of Applicant
Burell et al.Filing Date
1/30/2004Group Art Unit
3762

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	NAME	Class	Subclass	Filing Date If Appropriate
MB	6208347	3/2001	Migdal	345	419	
I	6246898	6/2001	Vesely	600	424	
MB	6504894	1/2003	Pan	378	8	

U.S. PATENT APPLICATION PUBLICATIONS

Examiner Initial	Document Number	Date	NAME	Class	Subclass	Filing Date If Appropriate
MB	2003/0018251	1/2003	Solomon	600	427	
MB	2004/0027347	2/2004	Farsaie	345	419	

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	COUNTRY	Class	Subclass	TRANSLATION YES NO

OTHER INFORMATION (including author, title, date, pertinent)

Sra et al., "Registration of Three-Dimensional Left Atrial Computed Tomographic Images With Projection Images Obtained Using Fluoroscopy", Circulation 2005; 112: 3763-3768.

EXAMINER

Mark Burell

DATE CONSIDERED

1-22-07

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449
(REV 2-32)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

File No.
144216 / GEM-0099

Serial No.
10/707,993

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant(s):
Burrell et al.

Filing Date:
01/30/2004

Group:
3762

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

<i>MB</i>	38	ACC/AHA/ESC Practise Guidelines; Eur. Heart J., Vol. 22, issue 20, October 2001; pages 1854 - 1923				
<i>MB</i>	39	M. D. Leash, T. Trepelse, H. Omran, A. Bartorelli, P. Della Bella, T. Nakai, M. Reisman, D. fleschenberb, U. Krumdsdorf, and D. Scherer; "Tiny Device Blocks 'Usless' Part of Heart, prevents blood clots;" Journal Report; American Heart Association; April 9, 2002				
<i>MB</i>	40	Ellen Barlow; "Operating in 3-D" found at www.med.harvard.edu/publications/HMAB/196fo3d.html				

Examiner

Mark Burrell

Date considered

1-22-07

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449
(REV 2-32)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

File No.
144216 / GEM-0099

Serial No.
10/707,993

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant(s):
Burrell et al.

Filing Date:
01/30/2004

Group:
3762

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

MB	35	M. Haissaguerre, P. Jais, S. C. Shah, A. Takahashi, M. Hocini, G. Quiniou, S. Garrigue, A. Le Mouroux, P. Le Metayer, and J. Clementy; "Spontaneous Initiation of Atrial Fibrillation by Ectopic Beats Originating in the Pulmonary Veins;" The New England Journal of Medicine, Vol 339, No. 10, September 3, 1998; pp 659-668.
1	36	C. Pappone, S. Rosanio, G. Augello, G. Gallus, G. Vicedomini, P. Mazzone, S. Gulletta, F. Gugliotta, A. Pappone, V. Santinelli, V. Tortoriello, S. Sala, A. Zangrillo, G. Crescenzi, S. Benussi, and O. Alfieri; "Mortality, Morbidity, and Quality of Life After Circumferential Pulmonary Vein Ablation for Atrial Fibrillation;" Journal of the American College of Cardiology, Vol. 42, No. 2; 2003; 185 - 197.
MB	37	J. Sra et al., "Current Problems in Cardiology- Atrial Fibrillation: Epidemiology, Mechanisms, and Management;" Current Problems in Cardiology, July 2000; pages 406 - 524

Examiner

Mal Burrell

Date considered

1-22-07

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449
(REV 2-32)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEFile No.
144216 / GEM-0099Serial No.
10/707,993

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant(s):
Burrell et al.Filing Date:
01/30/2004Group:
3762

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

MB	29	N. M. Alpert et al., "The Principal Axes Transformation - A Method for Image Registration;" <i>The Journal of Nuclear Medicine</i> ; 1990; 31:1717-1722.
/	30	P.A. van den Elsen et al.; "Medical Image Matching - A Review with Classification;" <i>IEEE Engineering in Medicine and Biology</i> , 1993; 26 - 38.
/	31	G. T. Barnes et al.; "Conventional and Spiral Computed Tomography: Physical Principles and Image Quality Considerations;" <i>Computed Body Tomography</i> , 1998, Lippincot-Raven, Philadelphia, PA pp 1 - 20.
/	32	Milan Sonka and J. Michael Fitzpatrick (eds); <i>Handbook of Medical Imaging Vol. 2. Medical Image Processing and Analysis</i> ; pp 129-174 & 447-506
/	33	W. M. Feinberg et al.; "Prevalence, Age Distribution, and Gender of Patients with Atrial Fibrillation;" <i>Arch. Intern. Med. Vol. 155</i> ; March 1995; pages 469-473
MB	34	J. L. Cox, J. P. Boineau, R. B. Schuessler, T. B. Ferguson, Jr., M. E. Cain, B. D. Lindsay, P. B. Corr, K. M. Kater, D. G. Lappas; "Operations for Atrial Fibrillation;" <i>Electrophysiology, Pacing and Arrhythmia, Clin. Cardiol.</i> 14, 1991; pages 827-834

Examiner

Mal Brehl

Date considered

1-22-07

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449
(REV 2-32)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEFile No.
144216 / GEM-0099Serial No.
10/707,993

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant(s):
Burrell et al.Filing Date:
01/30/2004Group:
3762

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

MB	22	B.A. Ardekani et al.; "A Fully Automatic Multimodality Image Registration Algorithm;" <i>Journal of Computer Assisted Tomography</i> ; 1995; 19:615-623.
	23	L. Thurfell et al.; "Registration of Neuroimaging Data: Implementation and Clinical Applications;" <i>American Society of Neuroimaging</i> ; 2000; 10:39-46
	24	S. A. Ben-Haim et al.; "Nonfluoroscopic, in vivo navigation and mapping technology;" <i>Nature Medicine</i> ; 1996, 2:1393-5.
	25	B. Taccardi et al.; "A new intracavitary probe for detecting the site of origin of ectopic ventricular beats during one cardiac cycle;" <i>Circulation</i> ; 1987; 75:272-81
	26	F. H.M. Wittkamp et al.; "New Technique for Real-Time 3-Dimensional Localization of Regular Intracardiac Electrodes;" <i>Circulation</i> ; 1999; 99:1312-17.
	27	V. Fuster et al. "ACC/AHA/NASPE 2002 Guidelines Update for Implantation of Pacemakers and Antiarrhythmia Devices;" <i>J. Am. Coll. Cardiol</i> 2001; 38:1-47.
MB	28	D. R. Ney "Volumetric Rendering of Computed Tomography Data: Principles and Techniques;" <i>IEEE Computer Graphics and Applications</i> ; 1990; 24-32

Examiner

Mal Brehl

Date considered

1-22-07

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449
(REV 2-32)

**U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE**

File No.
144216 / GEM-0099

Serial No.
10/707,993

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant(s):
Burrell et al.

Filing Date:
01/30/2004

Group:
3762

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

MB	17	M. V. Pitzalis et al., "Cardiac Resynchronization Therapy Tailored by Echocardiographic Evaluation of Ventricular Acnchrony;" <i>J. Am. Coll. Cardiol.</i> 2002; 40:1615-22.
	18	W. T. Abraham et al., "Cardiac Resynchronization in Chronic Heart Failure;" <i>N. Engl. J. Med.</i> 2002; 346:1845-1853
	19	C. A. Pelizzari et al., "Accurate Three-Dimensional Registration of CT, PET, and/or MR Images of the Brain;" <i>J. Comput. Assist. Tomogr.</i> 1989; 13:20-26
	20	A.C. Evans et al.; "MRI-PET Correlation in Three Dimensions Using a Volume-of-Interest (VOI) Atlas;" <i>J. Cereb Flow Metab.</i> 1991; 11:A69-A78.
MB	21	R.P. Woods et al.; "Rapid Automated Algorithm for Aligning and Reslicing PET Images;" <i>Journal of Computer Assisted Tomography</i> , 1992; 16:620-633

Examiner

Mal Burrell

Date considered

1-22-07

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449
(REV 2-32)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

File No.
144216 / GEM-0099

Serial No.
10/707,993

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant(s):
Burrell et al.

Filing Date:
01/30/2004

Group:
3762

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>MB</i>	25	6,421,412 B1	07/16/2002	Hsieh et al.	378	9	08/23/1999
	26	6,456,867 B2	09/24/2002	Reisfeld	600	407	02/21/2001
	27	6,490,475 B1	12/03/2002	Seeley et al.	600	426	04/28/2000
	28	6,490,479 B2	12/03/2002	Bock	600	518	12/28/2000
	29	6,549,606 B1	04/15/2003	Vaillant et al.	378	4	09/21/2000
	30	6,556,695 B1	04/29/2003	Packer et al.	382	128	09/16/1999
<i>MB</i>	31	6,584,343 B1	06/24/2003	Ransbury et al.	600	509	07/06/2000

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

<i>MB</i>	13	Z. Zhang; " Iterative Point Matching for Registration of Free-Form Curves;" <i>Inria</i> 1992, pages 1 - 40.
	14	C.L. Grines et al.; "Functional Abnormalities in Isolated Left Bundle Branch Block: The Effect of Interventricular Asynchrony;" <i>Circulation</i> ; 1989; 79:845-53.
	15	H. B. Xia et al., "Differing effects of right ventricular pacing and left bundle branch block on left ventricular function;" <i>Br. Heart J.</i> , 1993; 69:166-173.
<i>MB</i>	16	S. Cazeau et al., "Effects of Multisite Biventricular Pacing in Patients with Heart Failure and Intraventricular Conduction Delay;" <i>N. Engl. J. Med.</i> 2001; 344:873-880.

Examiner

Mal Buchel

Date considered

1-22-07

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449
(REV 2-32)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEFile No.
144216 / GEM-0099Serial No.
10/707,993

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant(s):
Burrell et al.Filing Date:
01/30/2004Group:
3762

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MB	17	6,256,368 B1	07/03/2001	Hsieh et al.	378	8	10/15/1999
	18	6,266,553 B1	07/24/2001	Fluhrer et al.	600	428	09/11/1998
	19	6,314,310 B1	11/06/2001	Ben-Haim et al.	600	424	01/22/1998
	20	6,325,797 B1	12/04/2001	Stewart et al.	606	41	04/05/1999
	21	6,348,793 B1	02/19/2002	Balloni et al.	324	309	11/06/2000
	22	6,353,445 B1	03/05/2002	Babula et al.	345	733	11/25/1998
	23	6,381,485 B1	04/30/2002	Hunter et al.	600	407	10/28/1999
MB	24	6,411,848 B2	06/25/2002	Kramer et al.	607	9	04/18/2001

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

MB	9	J. Schreieck et al., "Radiofrequency Ablation of Cardiac Arrhythmias Using a Three-Dimensional Real-Time Position Management and Mapping System;" <i>Pacing Clin. Electrophysiol.</i> , 2002 Dec., 25(12):1699-707.
	10	F. Wittkamp et al., "Real-Time, Three-Dimensional, Nonfluoroscopic Localization of the Lasso Catheter;" <i>J. Interv. Cardiac Electrophysiol.</i> 2002, 13:630
	11	J. Sra et al., "Cardiac Chamber Geometry Construction, Catheter Navigation and Ablation Using Cutaneous Patches;" <i>Supplement to Circulation</i> 2003 Oct., 108 (17): IV-585, Abstract 2667.
MB	12	J. Sra et al., "Three-Dimensional Right Atrial Geometry Construction and Catheter Tracking Using Cutaneous Patches;" <i>J. Interv. Cardiac Electrophysiol.</i> , 2003 14:897.

Examiner

Muh Birell

Date considered

1-22-07

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449
(REV 2-32)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

File No.
144216 / GEM-0099

Serial No.
10/707,993

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant(s):
Burrell et al.

Filing Date:
01/30/2004

Group:
3762

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MB	9	5,839,440	11/24/1998	Liou et al.	128	654	06/17/1994
	10	5,951,475	09/14/1999	Gueziec et al.	600	425	09/25/1997
	11	6,081,577	06/27/2000	Webber	378	23	02/19/1999
	12	6,154,516	11/28/2000	Heuscher et al.	378	15	09/18/1998
	13	6,233,304 B1	05/15/2001	Hu et al.	378	8	11/25/1998
	14	6,235,038 B1	05/22/2001	Hunter et al.	606	130	10/28/1999
	15	6,249,693 B1	06/19/2001	Cline et al.	600	410	11/01/1999
MB	16	6,252,924 B1	06/26/2001	Davantes et al.	378	8	09/30/1999

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

MB	5	R.J. Schilling et al.; "Simultaneous Endocardial Mapping in the Human Left Ventricle Using a Noncontact Catheter: Comparison of Contact and Reconstructed Electrograms During Sinus Rhythm;" <i>Circulation</i> 1998; 98:997-98.					
	6	C. C. Gornick et al., "Validation of a New Noncontact Catheter System for Electroanatomic Mapping of Left Ventricular Endocardium;" <i>Circulation</i> 1999; 99:829-835					
	7	J. Sra et al., "Noncontact Mapping for Radiofrequency Ablation of Complex Cardiac Arrhythmias;" <i>J. Interv. Cardiac Electrophysiol</i> 2001; 5:323-331.					
MB	8	N. M.S. de Groot et al., "Three-Dimensional Catheter Positioning During Radiofrequency Ablation in Patients: First Application of a Real-Time Position Management System;" <i>J. Interv. Cardiac Electrophysiol</i> 2001; Nov. 11(11):1183-92					

Examiner

Mark Burrell

Date considered

1-22-07

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449
(REV 2-32)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEFile No.
144216 / GEM-0099Serial No.
10/707,993

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Applicant(s):
Burrell et al.Filing Date:
01/30/2004Group:
3762

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MB	1	3,954,098	05/04/1976	Dick et al.	128	2.05 Z	01/31/1975
	2	4,574,807	03/11/1986	Hewson et al.	128	419 PG	03/02/1984
	3	5,245,287	09/14/1993	Nowak et al.	324	322	08/05/1992
	4	5,274,551	12/28/1993	Corby, Jr.	364	413.13	11/29/1991
	5	5,348,020	09/20/1994	Huston	128	696	12/15/1992
	6	5,353,795	10/11/1994	Souza et al.	128	653.2	12/10/1992
	7	5,568,384	10/22/1996	Robb et al.	364	419.13	10/13/1992
MB	8	5,823,958	10/20/1998	Truppe	600	426	06/15/1994

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MB	1	2002/0010392 A1	01/24/2002	Desai	600	374	08/06/2001
	2	2002/0046756 A1	04/25/2002	Laizzo et al.	128	899	09/14/2001
	3	2002/0138108 A1	09/26/2002	Kralik	607	9	10/10/2001
	4	2003/0018251 A1	01/23/2003	Solomon	600	427	04/05/2002
	5	2003/0023266 A1	01/30/2003	Borillo et al.	606	200	07/19/2002
MB	6	2003/0028183 A1	02/06/2003	Sanchez et al.	606	34	03/27/2001

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Patents, etc.)

MB	1	H. Nikagawa et al., "Role of the Tricuspid Annulus and the Eustachian Valve/Ridge on Atrial Flutter: Relevance to Catheter Ablation of the Septal Isthmus and a New Technique for Rapid Identification of Ablation Success;" <i>Circulation</i> 1996; 94:407-24.
	2	L. Gepstein et al., "A Novel Method for Nonfluoroscopic Catheter-Based Electroanatomical Mapping of the Heart: In Vitro and In Vivo Accuracy Results;" <i>Circulation</i> 1997; 95:1611-22.
	3	S. Shpun et al., "Guidance of Radiofrequency Endocardial Ablation with Real-time Three-dimensional Magnetic Navigation System;" <i>Circulation</i> 1997; 96:2016-21.
MB	4	J. Sra et al., "Electroanatomic Mapping to Identify Breakthrough Sites in Recurrent Typical Human Flutter;" <i>Pacing Clin. Electrophysiol</i> 2000; 23:1479-92.

Examiner

Mah Bahel

Date considered

1-22-07

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention

METHOD, APPARATUS AND PRODUCT FOR ACQUIRING
CARDIAC IMAGES

Application Number :

Confirmation Number:

First Named Applicant: Marc Burrell

Attorney Docket Number: 144213

Art Unit:

Examiner:

Search string: (5431688 or 5304212).pn

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
MD	1	5431688	1995-07-11	Freeman		607	10
MB	2	5304212	1994-04-19	Czeisler et al.		607	88

Signature

Examiner Name	Date
Mah Burrell	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	10707993
Filing Date	2004-01-30
First Named Inventor	Marc Anthony Burrell
Art Unit	3766
Examiner Name	Bockelman, Mark
Attorney Docket Number	144213/GEM-0099

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
MB	1	GENEVIEVE DERUMEAUX et al., Doppler Tissue Imaging Quantitates Regional Wall Motion During Myocardial Ischemia and Reperfusion, Circulation Journal of the American Heart Association, Circulation 1998; 97: 1970-1977	<input type="checkbox"/>
	2	OLIVIER GERARD et al., Efficient Model-Based Quantification of Left Ventricular Function in 3-D Echocardiography. IEEE Transactions on Medical Imaging, 21 (9): pp. 1059-68, September 2002.	<input type="checkbox"/>
	3	WAHLE et al., 3D Heart Vessel Reconstruction from Biplane Angiograms, IEEE Computer Graphics and Applications, 16(1): pp. 65-73, January 1996.	<input type="checkbox"/>
MB	4	HELMUT MAIR et al., Epicardial Lead Implantation Techniques for Biventricular Pacing via Left Lateral Mini-Thoracotomy, Video Assisted Thoracoscopy and Robotic Approach, The Heart Surgery Forum, 6(5): pp. 412-417, March 2003.	<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature		Date Considered	1-22-07
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)

Application Number	10707993
Filing Date	2004-01-30
First Named Inventor	Marc Anthony Burrell
Art Unit	3766
Examiner Name	Bockelman, Mark
Attorney Docket Number	144213/GEM-0099

U.S. PATENTS

[Remove](#)

Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
MB	1	5515849		1996-05-14	Murashita et al.	
MB	2	6058218		2000-05-02	Cline	

If you wish to add additional U.S. Patent citation information please click the Add button.

[Add](#)

U.S. PATENT APPLICATION PUBLICATIONS

[Remove](#)

Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
MB	1	20030120264	A1	2003-06-26	Lattouf	

If you wish to add additional U.S. Published Application citation information please click the Add button.

[Add](#)

FOREIGN PATENT DOCUMENTS

[Remove](#)

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² j	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button

[Add](#)

NON-PATENT LITERATURE DOCUMENTS

[Remove](#)